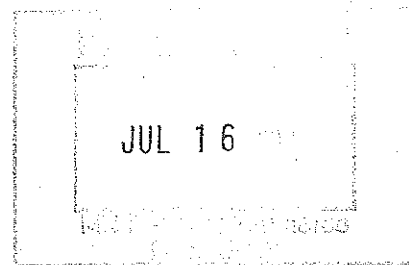
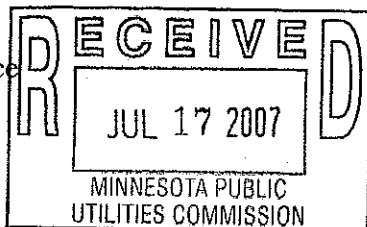




Protecting, maintaining and improving the health of all Minnesotans

July 12, 2007

Ms. Susan Steinhauer
Energy Facility Permitting
Minnesota Department of Commerce
85 Seventh Place East, Suite 500
Saint Paul, Minnesota 55155-2198



Dear Ms. Steinhauer:

This letter is in response to the request for comments on the proposed Taconite Ridge I Wind Energy Center Site Permit Application (PUC Docket No. E015/WS-07-676), St. Louis County.

- 1) A significant portion of the proposed project area falls within the watershed for that portion of the Minntac East Pit that is dewatered by the Minntac #2 Sump. The outfall for this sump flows to the Mountain Iron Pit, which is currently used as the water supply for the Minntac Mine processing plant. Although the water from this sump is not "pristine," given that it drains a taconite mining operation, it is important that the runoff from the proposed development not degrade the quality of water captured by this sump.
- 2) Item 5.14.2 indicates that a domestic-sized water well may be installed as part of this project. If this well ever were to a) serve at least 25 people for 60 or more days of the year, or b) have 15 or more service connections, then it would be classified as a public water system and be subject to regulation by the Public Water Supply Unit at the Minnesota Department of Health. A fact sheet defining the different types of public water systems has been enclosed for your reference.

Thank you for the opportunity to comment on the proposed permit. Please contact me at (651) 201-4654 if you have any questions on this matter.

Sincerely,

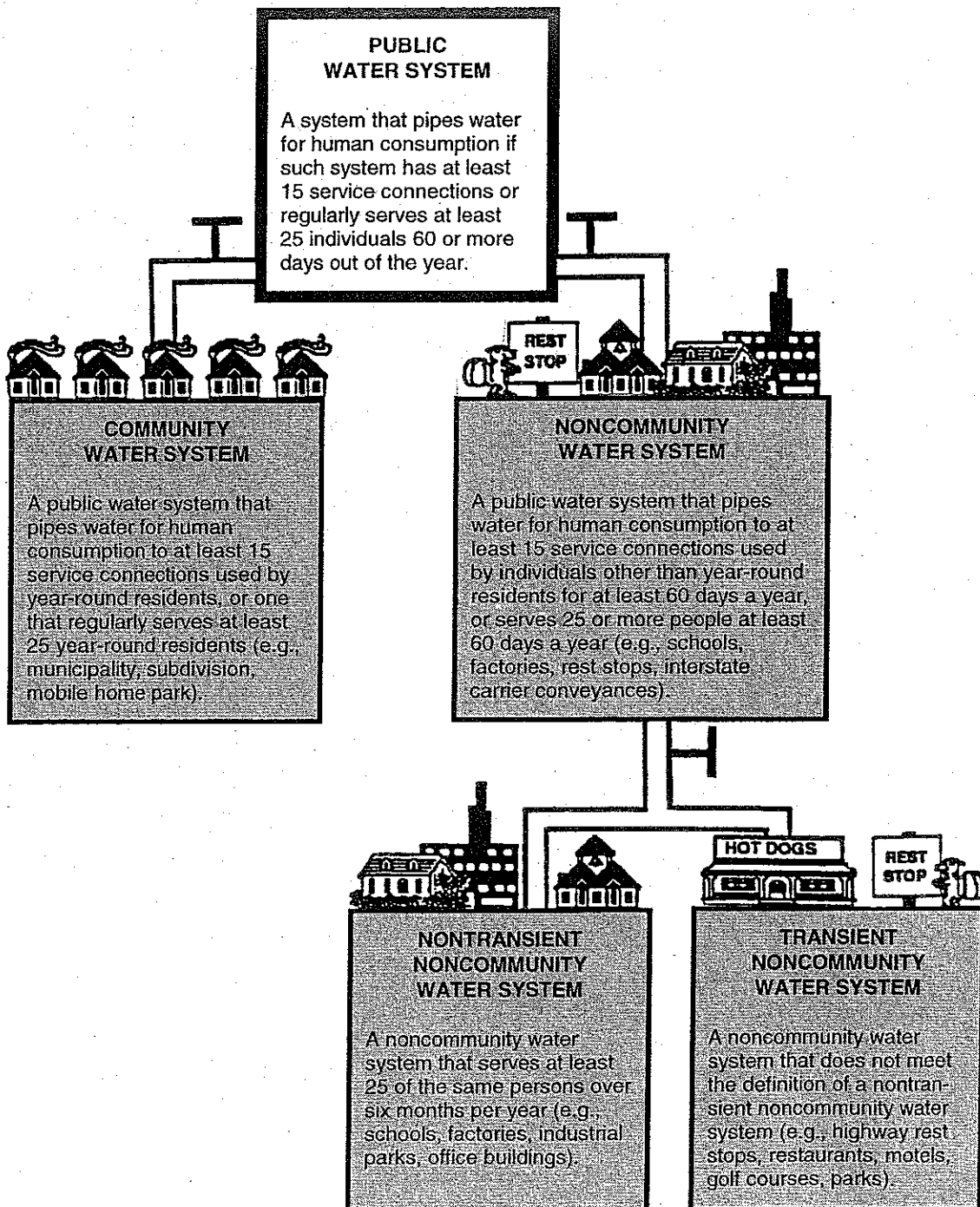
James F. Walsh, Hydrogeologist
Environmental Health Division
P.O. Box 64975
St. Paul, Minnesota 55164-0975

JFW:kmc
Enclosure

cc: Larisa Vishkovetsky, MDH Planner, Metro Office
Mark Petersen, MDH Sanitarian, Duluth District Office
Beth Kluthe, MDH Planner, Bemidji District Office

Types of Public Water Systems

A "public water system" has 15 or more service connections or regularly serves at least 25 people 60 or more days a year. A system that serves water 60 or more days a year is considered to "regularly serve" water. Public water systems can be publicly or privately owned. Public water systems are subdivided by regulation into two major categories: **community** and **noncommunity** water systems. This division is based on the type of consumer served and the frequency the consumer uses the water. Basically, a **community system** serves water to a residential population; whereas, a **noncommunity system** serves water to a nonresidential population. The **noncommunity** category is further broken down into two categories: **nontransient noncommunity** water systems and **transient noncommunity** water systems.



JUL 18 2007

MN Dept of Commerce
MailroomSteve Falkowski
1214 17th ST. S
Virginia MN 55792

7-17-07

docket number E.O.15/WS-07-676

Regarding the Taconite Ridge I. Wind Energy Center

After reading the draft permit I have these questions:

① Exactly how many birds and bats constitute an abnormally high number killed? This should be less vague

② Who will be counting or inspecting dead birds and bats? This should be done independently.

③ I disagree that the take of birds will be incidental. I have spent the last three falls doing raptor surveys on Lookout Mountain, just $1\frac{1}{2}$ miles east of the project area, and have come to see that this is an important raptor migration route. Hawks, eagles, and vultures follow the Laurentian Divide to take advantage of the updrafts created by the ridge. I watch them soar in these updrafts right at the project area as they make their way over to Lookout Mountain. Bald eagles, turkey vultures, broad-winged hawks, and red-tailed hawks are the most likely to be killed as they like to slowly soar there. In a mere 368 hours I've counted 1,208 raptors, including 371 bald eagles. Note that these are all migrants only, local birds excluded. My results are included.

Thank you,

Steve Falkowski

[illegible]

Lodest Mt Raptor Survey - Virginia MN

2004

HOURS	WEATHER	WIND DIR	WIND SPC	TURKEY	CORPSE	BIRD BAIT	HARBOR	BIRD BAIT	SHORELAND	CORPSES	GOSLING	REAR WING	FEED TALK	ROCK LIES	BLIND BAIT	KESTREL	MERLIN	PERCH	U.	TOTAL	
Nov 18	5 puffy	41 NW	5																	1	
continued 19	4 1/2 cloudy	40 SE	5																	1	
20	4 cloudy	35 SW	5																	5	
22	3 1/2 cloudy	37 S	10																	0	
23	5 cloudy	26 NW	5																	13	
24	5 1/2 sun	31 calm																		10	
27	4 1/4 snow	29 NW	5																	2	
29	4 puffy	30 S	20																	4	
DEC 1	5 1/4 snow	20 NW	10																	16	

5-24-52

* Some may have been the same bird that's been seen repeatedly on the Virginia water tower throughout September.

* Some may have been the same bird that's been seen repeatedly on the Virginia water tower throughout September.

Wm. Sullivan
March 10, 1967
+ 1/2 + 1/2 + 1/2

[illegible]

W

	HOURS	WEATHER	MAX TEMP	MAX WIND	TRUCKS V	OSPREY	BUD EASE	HARRIER	SHOEMAKER	CORPUS	COSBY WALK	BROWNING	RED TAIL	ROSEBERRY	BOB EASE	KESTREL	MERLIN	HERBERT	U	TOTAL
Sept	8	5	cloudy	53° NW 15		3	1		1			3	3						2	13
	12	4 1/2	clear	68° E 5	5		1		1										2	9
	18	4	rain	47° SW 3	1															1
	19	4	rain	48° NW 15	18	4			6			301				3			2	328
	27	5	rain	47° N 3			4	1	5			1				1			1	13
OCT																				
	11	3 1/2	snow	25° NW 30	1		2						1	1						5
	13	3 1/2	blizzard	32° NW 20			3		1				3						1	8
	14	3	sun	38° SW 15			4						4							8
	20	3	snow	38° calm																6
	23	5	snow	35° NW 10			5						16	1			1		1	24
	27	1 1/2	cloudy	33° SE 8																0
	31	4 1/2	snow	35° W 35			15						14	2						31
NOV																				
	1	4 1/2	light snow	27° W 15			11						12	1					2	26
	9	4 1/2	cloudy	29° NW 8			3				1		5	1					1	11
	16	2	cloudy	26° calm			3													3
Dec																				
			temp																	
Sept total	22 1/2		52.6		17	8	6	1	13			355	3			4	1	6		364
Oct total	23 3/4		30.9		1		29		1				38	4		1		2		76
Nov total	10 1/4		27.5				17					1	17	2				3		70
TOTAL	57				18	8	52	1	14		1	305	58	6		4	1	11		480

Suzanne Steinhauer

From: Trent R Wickman [twickman@fs.fed.us]
Sent: Thursday, July 26, 2007 8:52 AM
To: Suzanne Steinhauer
Cc: bfrancis@allete.com; bkrogh@mnpower.com
Subject: Re: FW: Taconite Ridge project

Suzanne -

thanks for your help in finding the documents.

I talked with my colleagues here at the Superior National Forest and we won't be able to review the project application and draft permit and send out a letter representing the view of the forest as a whole (i.e. representing all the programs) due to the current workload on the forest before the notice period ends next wed.

From my program's (air quality) point of view I see this project as a huge step forward and I look forward to more projects like this in the future in NE MN. Locating the wind generation right near the load centers makes a lot of sense for a multiple of reasons, as outlined in the application.

The wind data in this application supports the idea that additional wind is feasible in NE MN.

please include my name on the mailing list for any future wind generation projects in NE Minnesota.

Trent Wickman, P.E.
Air Resource Specialist
Superior National Forest
8901 Grand Avenue Place
Duluth, MN 55808
ph# 218-626-4372
fx# 218-626-4398
twickman@fs.fed.us

"Suzanne
Steinhauer"
<Suzanne.Steinhauer@state.mn.us>
07/23/2007 04:20 PM
To
<twickman@fs.fed.us>
cc
Subject
FW: Taconite Ridge project

From: Suzanne Steinhauer
Sent: Monday, July 23, 2007 4:17 PM
To: 'twickman@fs.fed'
Subject: Taconite Ridge project

Here's the website for the project:
<http://energyfacilities.puc.state.mn.us/Docket.html?Id=19151>

Please take a look at the draft permit as well as the permit application.

Let me know if you have any additional questions.

Suzanne Lamb Steinhauer

Project Manager, Energy Facility Permitting Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198
651-296-2888
suzanne.steinhauer@state.mn.us
<http://energyfacilities.puc.state.mn.us/>



David R. Moeller, Attorney – Legal Services

Fax 218-733-3955 / E-mail dmoeller@allte.com

August 1, 2007

VIA E-FILING

Dr. Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

**Re: In the Matter of a Site Permit Application for a Large Wind Energy Conversion System for the Taconite Ridge I Wind Energy Center in St. Louis County
Docket No. E015/WS-07-676**

Dear Dr. Haar:

Enclosed please find Minnesota Power's Comments in the above-referenced Docket.

If you have any questions, please contact me at the number listed below.

Yours truly,

David R. Moeller

DRM:sr

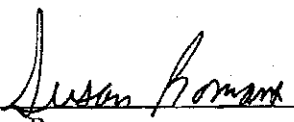
Enc.

cc: Suzanne Steinhauer – Department of Commerce (via e-mail)

STATE OF MINNESOTA)
) ss
COUNTY OF ST. LOUIS)

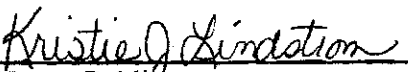
AFFIDAVIT OF SERVICE VIA
E-FILING

Susan Romans, of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 1st day of August, 2007, she e-filed Minnesota Power's Comments in Docket No. E015/WS-07-676 on Burl Haar and Sharon Ferguson.

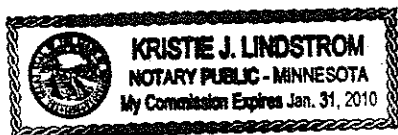


Susan Romans

Subscribed and sworn to before
me this 1st day of August, 2007.



Notary Public



**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

In the Matter of Approval of
a Site Permit Application for a Large
Wind Energy Conversion System for the
Taconite Ridge I Wind Energy Center
in St. Louis County

Docket No. E015/WS-07-676

**MINNESOTA POWER'S
COMMENTS**

I. INTRODUCTION

Minnesota Power submitted to the Minnesota Public Utilities Commission ("Commission") its Site Permit Application ("Application") for the Taconite Ridge I ("Taconite Ridge I") Wind Energy Center on May 29, 2007, pursuant to Minn. Stat. Chapter 216F and Minn. Rules Chapter 4401. Under Minn. Rules r4401.0460 the Commission accepted the Application and issued a draft site permit on June 19, 2007. Pursuant to Minn. Rules 4401.0550, subp. 3, the draft site permit for Taconite Ridge I is open for public comment until 4:30 p.m. on August 1, 2007. Minnesota Power respectfully submits these comments to the Commission and the Department of Commerce on specific sections of the draft site permit.

II. COMMENTS

A. B.1 "Site Clearance"; B.8. "Tree Removal"; and E.6. "Footprint Minimization"

A parameter that Minnesota Power will monitor during the operation of Taconite Ridge I is the effect of any wind shear on turbine components.

One factor that could contribute to wind shear may be the existence of tall growing vegetation (trees) on certain areas of the site in vicinity of the turbines. Trees may introduce an element of surface roughness that could contribute to wind shear. Minnesota Power plans to continue to monitor wind shear at Taconite Ridge. Part of this monitoring could include more expansive tree clearing in the area of the existing and/or permanent met tower to examine the

relationship between wind shear and tree cover. In the event trees are determined or predicted to be the cause of unacceptable wind shear, Minnesota Power may, at its discretion, decide to clear additional areas of trees within the project area. Any additional tree clearing to address wind shear will be done with the approval of the landowner (U.S. Steel), and these areas will be stabilized and maintained with suitable low growing vegetation in the future. Also, pursuant to Minnesota Power's lease, U.S. Steel has retained timber rights over much of the Project area. Additional areas of trees may be cleared for forest management or other purposes at the discretion of the landowner.

B. B.4. "Equipment Storage"; and C.5. "Wetlands"

The Project design includes a permanent lay down area that will be utilized for storage and staging of materials and equipment during construction and operation. This lay down area has been designed to minimize impact to wetlands; however some wetlands will need to be filled. Permits from the Army Corps of Engineers, if applicable, and from the applicable Local Government Unit under the Minnesota Wetland Conservation Act will be obtained prior to any wetland filling in the designed lay down area. Any other areas used for temporary lay down or staging during construction will not be located in wetlands.

Minnesota Power has already applied for a wetlands permits from the Army Corps of Engineers and the applicable Local Government Unit for unavoidable wetland impacts (approximately 2.0-2.5 acres) resulting from Project. None of the impacted wetlands are public water wetlands as defined in Minn. Stat. § 103G.005, subd. 15(a).

C. E.5. "Turbine Spacing"

The current planned distance between Turbine #1 and Turbine #2 is approximately 876 feet. This is slightly less than the standard 3-rotor diameter spacing of 945 feet for 96 meter (315') diameter rotors. The location of Turbine #1 was moved eastward (closer to Turbine #2) from the original design to avoid predicted potential microwave interference.

D. C.2. "Residences"; C.3. "Roads"; and C.4. "Wildlife Management Areas"

No wind turbines or associated facilities are located within 500 feet of an occupied dwelling; within 250 feet of a public road; or within any Waterfowl Production Area, State Wildlife Management Area, Scientific and Natural Area, or County Park.

E. E.3. "Noise"; and F.2. "Noise"

Information submitted in the Application demonstrates that the facility will operate in compliance with any applicable noise standard.

Minnesota Power requests the elimination of any requirement to conduct a noise study as anticipated in Section F.2. — "Noise", because noise information submitted in the Application demonstrates that the Project will operate well within any applicable noise standard at applicable receptor sites.

F. C.1. "Wind Access Buffer"; I.2. "Final Boundaries"; and J.1. "Wind Rights"

Minnesota Power intends to further modify its lease arrangements with the landowner (U.S. Steel) to satisfy the wind access buffer and wind rights requirements of the site permit. A Memorandum of Lease reflecting certain terms of the lease, as amended, including the wind rights, will be recorded with St. Louis County and demonstration of satisfaction of these requirements will be available prior to commencement of construction. Minnesota Power requests that the final boundaries of the Project be shown as applied for in the Application. Minnesota Power requests that wind rights obtained beyond those boundaries to satisfy any requirements of the site permit be reserved as trade secret, along with any detailed information included in any lease arrangements with the landowner.

G. B.3. "Fences"

Minnesota Power request that this section be eliminated from the site permit. The Project is in a non-agricultural area and here are no gates or fences in association with this Project.

Dated: August 1, 2007

Respectfully submitted,

/s/ David R. Moeller

David R. Moeller

Attorney

Minnesota Power

30 West Superior Street

Duluth, MN 55802

218-723-3963

dmoeller@allete.com